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FACIAL PACK MATERIAL, ITS PRODUCTION METHOD,
AND ITS APPLICATION

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Claims

1. A facial pack material made of a flexible film containing on one surface either a dried thin layer of adhesive paste, which is harmless to the skin, or a [thin] layer in which fine powder of the adhesive paste is dispersed, which has holes that individually correspond to both eyes, nostrils, and lips of a human face in a larger arrangement than the arrangement of both eyes, nostrils, and lips of the human face, and which are larger than both eyes, nostrils, and lips of a human face.

2. A facial pack material described in Claim 1 and made of a flexible film containing a thin nonwoven fabric composed of fibers tangled like [illegible] and in which fine powder of adhesive paste, which is harmless to the skin is dispersed,

3. A partial facial pack material made of a flexible film containing on one surface either a dried [thin] layer of adhesive paste, which is harmless to the skin, or a [thin] layer in which fine powder of the adhesive paste is dispersed, which has holes that individually correspond to both eyes, nostrils, and lips of a human face, which are larger than both eyes, nostrils, and lips of a human face, in a bigger arrangement than the arrangement of both eyes, nostrils, and lips of a human face, and cut to the specific size which is smaller than an entire human face so that the material cannot cover the entire human face and cannot cover surroundings of both eyes, nostrils, or lips.

4. Production of a facial pack material that employs coating and drying an aqueous solution of hydrophilic adhesive paste on one surface of a flexible film, then forming the holes that individually correspond to both eyes, nostrils, and lips of a human face, which are larger than both eyes, nostrils, and lips of a human face, in a larger arrangement than the arrangement of both eyes, nostrils, and lips of a human face.

5. Production of a facial pack material that employs coating and drying a nonaqueous solution made by suspending fine powder of hydrophilic adhesive paste, which is harmless to the skin, in a nonaqueous solution of both lipophilic and hydrophilic adhesive paste, which is harmless to the skin, on one surface of a flexible film, and then forming the holes that individually correspond to both eyes, nostrils, and lips of a human face, which are larger than both eyes, nostrils, and lips of a human face, in a larger arrangement than the arrangement of both eyes, nostrils, and lips of a human face.

6. Application of a facial pack material followed by wetting and adhering a flexible film containing on one surface either a dried [thin] layer of adhesive paste, which is harmless to the skin, or a [thin] layer in which fine powder of the adhesive paste is dispersed, on the face, or adhering a flexible film containing on one surface either a dried [thin] layer of adhesive paste, which is harmless to the skin, or a [thin] layer in which fine powder of the adhesive paste is dispersed, on the wet face, or adhering a flexible film containing on one surface either a dried [thin] layer of adhesive paste, which is harmless to the skin, or a [thin] layer in which fine powder of the adhesive paste is dispersed on the face coated with an effective

component, and then allowing it to stand for the specific time period, and then peeling the film.

Detailed explanation of the invention

The present invention is concerned with a facial pack material made with a flexible film containing a [thin] layer of dry adhesive paste, which is harmless to the skin, having holes corresponding to both eyes, nostrils, and lips, and used by either wetting and then adhering to the face or adhering to the wet face, its production, and its application.

The conventional pack materials were used to coat the skin. The pack materials were effective to firm flabby skin, to adsorb and remove contamination from the skin surface, and to smooth the skin. The pack materials could form layers which had both maximum concentration and the minimum permeability, compared with other cosmetic materials. Because air was shut off, the sebum always present in the skin surface was not oxidized but [accumulated] under the layer, and softened the epidermis. Because the space between cells or pores of the skin were expanded, absorption of the effective components of a pack material was accelerated. As temperature of part of the skin was increased, circulation of blood and lymph was accelerated, so that [illegible] of the skin could be accelerated and both air holes and hair holes could be expanded, resulting in removal of egesta and dirt.

Therefore, the pack was a most effective treatment. Washing the face in the final process brought refreshment and cleanliness.

Because the pack had the above-mentioned excellent effects, a variety of pack material was sold commercially, and various

methods for production of a facial pack material using the available ingredients were described in the literature.

However, all of the methods employed coating the face with the mud pack material, drying it, and then washing it off or peeling it off.

Reasons why the pack has not been popular despite its excellent effects are the following: it was difficult to apply the mud pack material for coating, and it was inconvenient because no talking was allowed until the pack material dried. In order to use eggs or fruit juice to make a pack material at home, flour had to be used for kneading, which was complicated. The product could not be stored, and it took a long time to wash off. It was not as easy to use the conventional materials as described in the literature.

Research on a facial pack method to easily obtain the pack effects without applying the mud pack materials on the face for coating was undertaken by the inventors; a facial pack material easy to use and able to exhibit the effects when it was wet and applied on the face, when it was applied on the wet face after washing the face, or when it was applied on the face which had been treated by cosmetic [ingredients], could be completed by containing in one surface either a dried [thin] layer of adhesive paste, which is harmless to the skin, or a [thin] layer in which fine powder of the adhesive paste is dispersed, which has holes that individually correspond to both eyes, nostrils, and lips of a human face in a larger arrangement than the arrangement of both eyes, nostrils, and lips of a human face, which are larger than both eyes, nostrils, and lips of a human face.

Satisfactory pack effects can be easily obtained without using any special medicinal ingredient. If necessary, the

material containing natural and effective ingredients including food, [illegible; possible seaweed] extract, or drugs, is applied to the face for coating, and any desirable multiplier effect can be obtained. A small piece made by cutting the material, not able to coat the entire face, and having any desirable shape, can be used for any specific region such as cheeks, around the eyes, or around the lips, where the skin is locally dried and rough.

In the following, the details of the present invention are explained.

A film of the present invention has a thickness of 5-50 μm , especially 8-20 μm . In the case of a film which is too thick, the film cannot be molded along the face. A plastic material such as polyacetate, polybutadiene, ionomer, polyamide, polyvinylidene chloride, ethylene-vinyl acetate copolymer, polyvinyl chloride, polyethylene, polypropylene, or polyester may be used, or the randomly rough file-like surface may be pressed against the material which is not air-permeable, to make a lot of fine holes, so that air-permeability can be obtained. Polyvinyl alcohol or ethylene-vinyl acetate copolymer can be used as a hydrophilic plastic material. A paper composite [material] or a paper-processed material can be used. Any thin, flexible, and permeable or nonpermeable film such as a thin paper-like material made of cellophane paper, [illegible] paper fiber, [illegible; possibly fabric], Japanese paper fiber, or fibrous plastic, the thin paper-like material coated with a thin plastic film, can be used.

In the case of an air-permeable film, after adhering to the face, as the wet adhesive paste dries, the skin is stimulated, which accelerated the effects of the pack. In the case of a nonpermeable film, the wet adhesive paste is not dried, the holes

on the skin are expanded, and excretion of sebum is accelerated, and the effect on [illegible] is improved.

It is required for the holes formed on the film corresponding to [actual] eyes, nostrils, or lips to be bigger than the eyes, the nostrils, or the lips. In the case of using it for forehead or cheeks, no hole is required.

If the above-mentioned parts are covered with the film, discomfort or difficulty in breathing will be increased. Independent holes may be made for both eyes or two holes may be connected to make a hole for both eyes. In the case of making two independent holes, the distance between each eyebrow and each eye is desirably longer than the actual distance between each eyebrow and eye. One hole big enough for both nostrils is required. The distance between nose and mouth is desirably longer than the actual distance between nose and mouth. A hole bigger than the lips is made for mouth with the distance longer than the actual distance.

The arrangement larger than the actual one is required, because a facial pack material must be completely applied on all of the projections and indentations through there are complicated and high projections and deep indentations through there are complicated and high projections and deep indentations in the face. A film material of the present invention is not designed to have elasticity to completely coat all of projections and indentations in the face, but is designed to have flexibility, good contact property, and good lubricating property due to dissolution of an adhesive paste, to partially make wrinkles so that the same shape with the same projections and indentations as the face can be made. Therefore, when a facial pack material of the present invention is used, both eyes, nostrils, and lips must

match to each hole of the film. If the film is too big, the film is wrinkled for [illegible], so that the film can be molded along both projections and indentations of the face due to viscosity of an adhesive paste applied on the back surface for coating, and that the pack can be effective.

In the case of the face which is especially rough, a small piece suitable for the specific region can be used. In this case, the piece must be larger than the region requiring treatment, and the piece must have a larger hole than an actual hole. In the case of either [illegible] or [illegible], no hole is required.

Either a transparent or a semitransparent, slightly colored [material] such as sky blue, pink, or beige, and either a fibrous paper-like or a fabric-like material is suitable as a facial pack material.

Examples of adhesive paste include hydrophilic adhesive paste, which is harmless to the skin and which exhibits adhesiveness with small amounts of water, such as α -amylase, sodium polyacrylate, CMC, methylcellulose, gelatin, casein, or gum arabic. polyvinylpyrrolidone, polyacrylic acid, and others which have affinity for polyvinyl chloride or polyethylene, and are soluble to nonaqueous solvent, although they have unsatisfactory viscosity, can be included in the examples. A facial pack material made by coating, spraying, or impregnating, or adhering, and then drying on one surface of a film with the above-mentioned adhesive paste, is wet and then applied on the face or is applied on the wet face.

A hydrophilic adhesive paste is suitable for the face washed and then treated with plenty of the water-in-oil emulsion or cream.

As the above-mentioned adhesive paste such as α -amylase, sodium polyacrylate, or CMC has high viscosity, it exhibits satisfactory viscosity with small amounts of water, so that it can be a desirable adhesive paste. However, because a conventional plastic film is [hydrophobic], it is difficult to evenly adhere the aqueous solution as a [thin layer]. Small amounts of the adhesive paste can be firmly adhered to a plastic film by coating or spraying on a plastic film a product made by suspending the above-mentioned highly viscous adhesive paste such as polyvinylpyrrolidone in alcohol solution having low concentration of the adhesive paste which can be dissolved in either a solvent such as alcohol which is compatible with a hydrophobic film or water.

Small amounts of the adhesive paste are contained in [illegible] fiber to make [it] in a thin-paper state, then the [illegible] may be used by itself, or a plastic thin layer may be laminated on one surface of the [illegible].

In the following, the details of the present invention are explained with application examples.

Application Example 1

A solution made by suspending sodium polyacrylate powder of 200-300 mesh (3%) in isopropyl alcohol solution of 0.5% polyvinylpyrrolidone was coated on a low-density polyethylene film having thickness of 10 μm . Sodium polyacrylate was adhered in amounts of 7 g per m^2 . After isopropyl alcohol was evaporated, each of the 50 films was alternatively laminated on each board, and cut (vertically 30 cm x horizontally 25 cm). Holes

corresponding to both eyes, nostrils, and lips, but larger than both eyes, the nostrils, and the lips, were made in the film.

The surface of the film, to which the thin film of the adhesive paste was adhered, was adhered to the washed and wet face. Because the plastic film was thin and flexible, and because the adhesive paste exhibited both lubricating property and viscosity due to water, the film could be locally adhered to any desirable location. Because an arrangement of the holes corresponding to both eyes, nostrils, and lips was larger than that of both actual eyes, nostrils, and lips, the position could be adjusted by [illegible] to match both of the actual eyes, nostrils, and lips. Because the wrinkles were locally made, the entire shape of a facial pack material of the present invention could be molded on the nose, cheeks, and lips of each individual. Both films were adhered on [illegible] due to viscosity of the adhesive paste. A person could take a bath or do anything while using the facial pack material. After allowing to stand for the required time period, the material could be easily peeled off to remove the film. A refreshing feeling could be obtained by washing the face.

If necessary, any required cosmetic [ingredient] such as egg whites, egg yolks, whole eggs, fruit juice, milk, aloe vera extract, or neutralizing cream was coated on the face, then the facial pack material was applied for adhesion, so that introduction of the material could be accelerated, and the multiplier effect could be obtained.

Application Example 2

An aqueous solution (6%) of α -amylase (50 g/m^2) was applied to plain cellophane paper (thickness: about $15 \mu\text{m}$), dried, and then used for production of a facial pack material in the same process used in Application Example 1.

Because a wet cellophane paper had both the dimensional variation [property] and water-permeability, it shrank when the pack material was adhered to the face and dried, resulting in firming the skin. Because it was dried, it was slightly resistant to exfoliation.

Application Example 3

Fine powder of gum arabic was mixed in [illegible] Japanese paper (10 g per m^2), each paper was alternatively laminated on a board in the same process used in Application Example 1, and holes for both eyes, nostrils, and lips were made. The product was put on the face and then used as Application Example 1. The same results obtained in Application Example 2 were obtained.

Application Example 4

A solution made by suspending 3% sodium polyacrylate powder (200-300 mesh) in alcohol solution of 0.5% polyvinylpyrrolidone, was applied on [the paper-fiber side] of a composite (thickness: about $10 \mu\text{m}$) of a plain cellophane paper (thickness: $5 \mu\text{m}$) and a machine-made paper fiber for coating. Sodium polyacrylate was adhered in amounts of about 10 g per m^2 . After the alcohol evaporated, each of the 50 products was alternatively laminated

on a board and then cut (vertically 30 cm x horizontally 25 cm). The holes, which were larger than the actual eyes, nostrils, and lips, were made in a larger arrangement than that of the actual eyes, nostrils, and lips.

The facial pack material was soaked in water, the surface of paper fiber was adhered to the face in the same process used in Application Example 1.

Because a composite of paper fiber and cellophane paper was used as the raw material of the film in this application example, the product was not easily curled by moisture, the product could maintain rigidity which did not disrupt adhesion on the face, and when it was soaked in water, water could be quickly and evenly distributed on the entire surface of the film. Because the paper fiber was gentle to the skin, no discomfort was obtained by using it. After the product was adhered to the face, water evaporated through both the paper fiber and the cellophane paper, resulting in about 5% dimensional shrinkage, which obtained firmness for the skin. The product was slightly resistant to exfoliation. The product gave refreshment after use.

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